

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/026,471	MILLER, CHARLES A.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Trung Q Nguyen	2829	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 09/10/2004.
2. ☒ The allowed claim(s) is/are 1-7,9-11,18,19,24,25,35 and 36.
3. ☒ The drawings filed on 27 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. Applicant's election of Species of Figure 3D, claims 1-7, 9-11, 18-19 and 24 in Paper No. 0803 is acknowledged. Because applicant elected without traverse, therefore, non-elected claims 8,12-17, 20-23, 26-32 and 34 are now cancelled.

### ***Allowable Subject Matter***

2. Claims 1-7, 9-11, 18-19, 24-25 and 35-36 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: Claims 1, 24 and 36 recite, inter alia, "a package coupled to the probe elements so that the probe elements extend external to the package, wherein the package includes at least one die with active electronic components electrically connected to the probe elements, and at least one coolant port that allows a coolant to enter the package and cool the active electronic components of each die during a test operation."

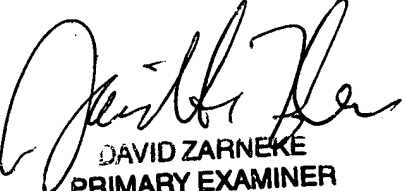
Applicant's arguments base on the above limitations overcome the office action mailed on 06/08/2004. In addition, the coolant directly cools active electronic components on dies; this way, the present invention reduces the magnitude of thermal gradients across each die and makes remaining thermal gradients more even across each die; hot spots are also reduced or eliminated.

### Conclusion

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trung Nguyen whose telephone number is **(571) 272-1966**. The examiner can normally be reached on Monday through Friday, 8:30AM – 5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **MICHAEL TOKAR** can be reached at **(571) 272-1812**.

*Trung Nguyen*  
Patent Examiner  
Group Art Unit 2829  
December 17, 2004

  
DAVID ZARNEKE  
PRIMARY EXAMINER  
12/21/04